

Age and sex play important parts in the causation of gall-stones. Women are much more often affected than men, and those who are aged thirty and upwards are most often the victims.

Post-mortem examinations show that gall-stones are very frequently found where no clinical evidence of their presence existed.

Though cholesterine forms the greater part of most biliary calculi, it is only sparingly secreted by the liver, but is secreted largely by the epithelium of the bile ducts and gall-bladder. This may account for the fact that the stones are, as a rule, formed in the gall-bladder, obstruction taking place owing to thickening, or peculiarity in the valves, or the opening into the duodenum.

We are also reminded that as the bile leaves the intra-hepatic ducts it is a non-viscid fluid of a slightly alkaline reaction. It does not assume a viscid character until after admixture with the mucoid secretions from the bile ducts and gall-bladder. This viscosity favors calculus formation.

In young people, the greater activity of the individual and the larger amount of muscular structure of the walls of the gall-bladder do not favor the formation of stones; whilst in old people, decreased activity and thinning of the muscular coat render the individuals more liable to calculus formations, though hepatic colic is not so common.

Neither nationality nor diet seems to have much influence on the affection.

Great advance has of recent years been made in the surgery of the gall-bladder. It is but a few years since cholecystotomy was unthought of by the ordinary practitioner, and it is well within the recollection of most of us when it was a common thing for life to be sacrificed on account of cholelithiasis with obstruction, no surgical interference having been mooted as treatment. How careless would be the man now who would allow such a case to slip through his care without an attempt being made by the surgeon to relieve the obstruction!

Diagnosis of biliary colic, in the majority of cases, is made by attention to details. Pain (in the region of the gall-bladder) coming on suddenly of a boring character, radiating upwards, followed by chills, fever, sweating, vomiting, tenderness over gall-bladder and liver, itching and itcheric hue of skin, darkened urine and clay-colored stools—these are the chief symptoms, but they vary with each case. In some there is distention of the gall-bladder, but in the majority of cases of impaction of stones in the cystic duct there is a shrinking of the gall-bladder and no tumor can be felt from without.

*Treatment of Acute Attack.*—First, relieve the pain. Combined